



Powering Connected Vehicles with MongoDB and Amazon Web Services (AWS)



Connected vehicle capabilities are no longer a luxury – they’re a necessity. Customer buying decisions are increasingly dependent on software functionality and integration into their digital lifestyles, and connected vehicle applications can unlock a new level of information and control, way beyond the physical driving experience.

MongoDB Atlas on AWS removes the non-differentiating integration or “technical plumbing” work between vehicles, the cloud, and mobile apps, and accelerates building the next generation of digital twin applications.

The Challenge

Too much time spent on non-differentiating efforts makes it hard to remain competitive with limited resources.



Wide varieties of powerful technologies are stitched together increasing complexity and cost, ultimately slowing down progress.



Competitive advantage cannot be bought but must be built, despite tight budgets and limited resources.



The Solution

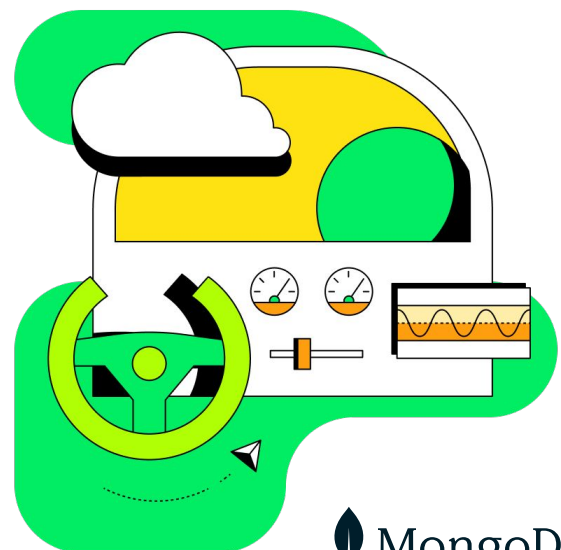
MongoDB Atlas on AWS eliminates the technical plumbing for a simplified flow of data that’s developer friendly.

Atlas on AWS offers a single platform for a variety of use cases with built-in features to simplify architecture and reduce costs.

With Atlas on AWS, you can build next-gen applications that meet and exceed customer expectations.

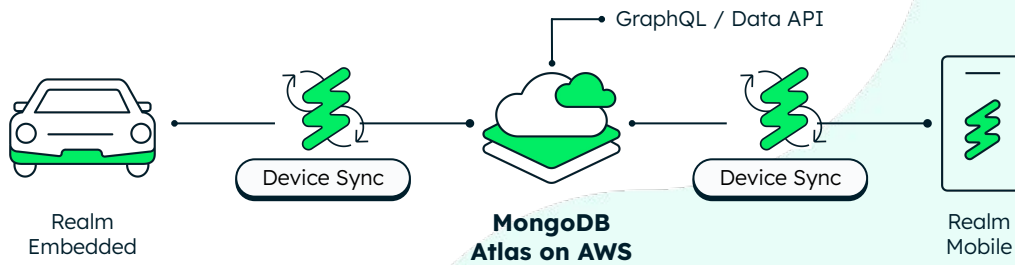
Gain a Competitive Advantage with MongoDB Atlas and AWS

- Connected Vehicles
- Application Modernization
- Edge Computing
- IoT Applications
- Real-Time Analytics
- Connected Equipment
- Connected Workforce
- Manufacturing Intelligence
- Fleet Management





Tracking the flow of data from vehicle to mobile application



MongoDB Atlas on AWS helps you unlock innovative use cases so you can deliver next-generation vehicle experiences. Discover the tools you need to make real-time decisions, increase overall equipment effectiveness, improve product quality, and enhance the customer experience.

- **MongoDB Atlas:** Fully managed developer data platform on AWS
- **Realm SDKs:** Lightweight embedded database for Flutter, Kotlin, Swift, C++
- **Device Sync:** Sophisticated bi-directional data synchronization

The Benefits of Powering Auto Applications with MongoDB and AWS

Industry 4.0	Bring on data-driven insights and real-time analytics. With MongoDB Atlas on AWS you can combine your data across IT and operational technology (OT) and analyze it in real time for faster decisions, higher overall equipment effectiveness (OEE), and better quality.
Real-time analytics	As industrial IoT (IIoT) continues to boom with a surge of connected devices, limits are pushed each day with increased volumes of data. Atlas on AWS scales seamlessly and can ingest enormous amounts of sensor and event data. Power real-time analytics to catch critical events or changes as they happen.
Dynamic scalability	MongoDB Atlas on AWS provides automated scalability allowing you to start small and dynamically adapt your clusters with increasing/decreasing demand. Especially as sensor data gets colder over time, you can automatically offload cold data into Amazon S3, while maintaining the ability to query the hot and cold data through a single API.
Developer efficiency	As a leading developer platform on AWS, MongoDB Atlas helps you gain efficiencies to build digital twins and applications faster. Use MongoDB Atlas as your cloud backend on AWS—plus MongoDB Realm and Atlas Device Sync—to make it easier to connect smart vehicles with cloud and mobile applications. This combination delivers powerful middleware for your digital twins, so you can devote more time to creating amazing vehicle experiences.
Time-series applications	Build time-series applications and analyze trends and identify anomalies quickly with MongoDB Atlas on AWS, which supports time-series data natively. The combination of time-series data with other data structures such as digital twin models within the same data platform dramatically reduces complexity, development efforts, and costs by avoiding additional technologies, ETL processes, and data duplication.

Visit www.mongodb.com/mongodb-and-aws-for-automotive to learn more.